NutriPATH
INTEGRATIVE PATHOLOGY SERVICES

Genova CARDIOGENOMIC PLUS PROFILE

The CardioGenomic Plus Profile uses genomic testing to identify the risk of genetic susceptibility to cardiac related diseases and conditions. Specifically, the CardioGenomic Plus profile evaluates genetic variations, called single nucleotide polymorphisms (SNPs) in genes that modulate blood pressure regulation, lipid balance, nutrient metabolism, inflammation, and oxidative stress.

By evaluating a carefully selected group of genetic variants, such as the Cardio Genomic Plus profile which provides a glimpse into your potential health future. The advantage: you will be empowered to modify the expression of disease years before a condition might otherwise develop.

Why is the CardioGenomic Plus Profile clinically useful?

Specialised genomic testing can provide a glimpse into ones potential health future. Genetic testing enables one to minimise the risk by:

- Identifying hidden gene mutations that may promote chronic disease
- Preventing disease through early intervention
- Modifying gene expression through more precise, targeted, individualised interventions
- Identifying key areas for follow-up testing
- Monitoring therapeutic effectiveness of intervention strategies with laboratory testing

POTENTIAL GENETIC SUSCEPTIBILITIES	
Atherosclerosis	Myocardial infarction
Endothelial dysfunction	Obesity
Hypercholesterolemia	Stroke
Hypertension	Thrombosis

Whether or not you choose to see genes, they are always there and will continue to play an important role in one´ health. With genomic testing, by choosing to look at them, you have the opportunity to influence the ultimate outcome and more actively promote a healthy life.

The CardioGenomic Profile evaluations include:

Cholesterol Regulation and Atherosclerosis

- ApoE (apolipoprotein E), CETP (cholesteryl ester transfer protein), SELE (selectin E)

These genes affect how the body breaks down and clears fats and how cholesterol is processed. They also affect lipid balance, plaque formation, and blood vessel integrity and function.

Methylation

- MTHFR (methylenetetrahydrofolate reductase)

Polymorphisms of this enzyme can disrupt the metabolism of homocysteine, resulting in its accumulation as well as impaired methylation. The presence of these SNPs can increase risk of cardiovascular disease, blood vessel damage, thrombosis (blood clots), stroke, and degenerative aging.

Hypertension

- GNB3 (guanine nucleotide-binding protein), AGTR1 (angiotensin II receptor-1)

Polymorphisms of these genes are associated with blood vessel constriction, sodium and water retention, obesity, and increased susceptibility to hypertension.

Coagulation

- Factor 2 (prothrombin), Factor 5 (Leiden), PAI-1 (Plasminogen activator inhibitor-1), GP3a (Glycoprotein 3)

These genetic variants can over-activate blood clotting processes, increasing the risk of sudden cardiac events such as thrombosis, heart attacks, and strokes.

GENOVA CARDIOGENOMIC PLUS (buccal swab) [Test code: 8002]

❖ APOE, CETP, SELE, MTHFR, GNB3, AGTR1, Factor 2, Factor 5, PAI-1, GP3A

Other genomic tests available

- **Genova DetoxiGenomic Profile:** CYP1A1, CYP1B1, CYP2A6, CYP2D6, CYP2E1, CYP2C9, CYP1C19, CYP3A4, COMT, NAT1, NAT2, GSTM1, GSTP1, SOD1, SOD2.
- **Genova EstroGenomic Profile:** CYP1A1, CYP1B1, COMT, GSTM1, GSTP1, GP3A, PAI-1, Factor 2, Factor 5, APO-E, MTHFR, TNFα, IL-6, VDR, TNFα, IL-6.
- **Genova ImmunoGenomic Profile:** IL-1β, TNFα, IL-4, IL-6, IL-10, IL-13.
- **Genova NeuroGenomic Profile:** COMT, MTHFR, GSTM, GSTP, SOD2.

How to order a test kit:

To order a test kit simply request the test name or test code on a NutriPATH request form and have the patient phone NutriPATH Customer Service on **1300 688 522**.

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GENOVA DIAGNOSTICS